PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 117 (Clopper Road) and Hopkins Road in Montgomery County. The east leg of MD 117 (Clopper Road) is being widened in this area for the purpose of maintaining the existing right turn only lane. The west leg of MD 117 (Clopper Road shall be re-marked, creating an eastbound left turn lane.

MD 117 (Clopper Road) is assumed to run an east-west direction.

II. INTERSECTION OPERATION

- 1. The intersection is to continue operating in a three-phase, semi-actuated mode, with the MD 117 (Clopper Road) approaches running concurrently. Farside sampling station shall be provided on the east leg of MD 117 (Clopper Road) at this intersection. The Hopkins Road approach shall run independently.
- 2. The existing eight-phase controller housed in a NEMA size "6" base-mounted cabinet shall remain in operation at this intersection.

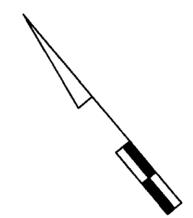
III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable. Contact Mr. Bob Gonzales at (240) 777-8761 seventy-two hours in advance of intended work.
- 2. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

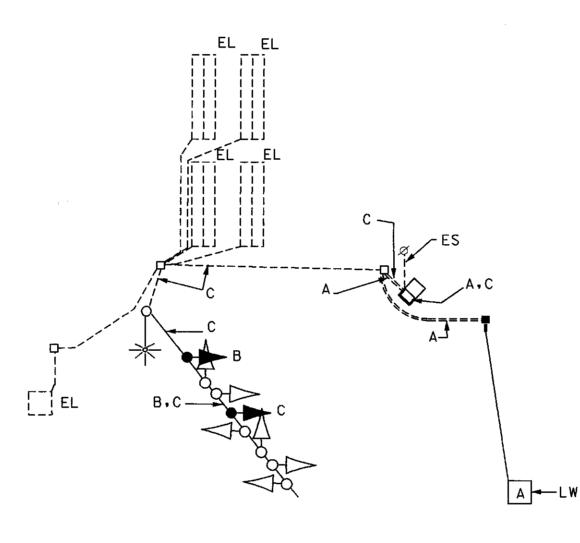
EQUIPMENT LIST

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

SPEC. NUMBER	QUANTITY	DESCRIPTION
805	55 L.F.	Furnish and install 3" (Schedule 80) rigid PVC conduit (trenched).
805	5 L.F.	Furnish and install 1" liquid tight flexible non-metallic conduitfor detector sleeve.
810	190 L.F.	Furnish and install loop wire encased in flexible tubing (No. 14 AWG).
	70 L.F.	Furnish and install Canoga 4-conductor electrical cable (No. 14 A.W.G.) shielded.
810	25 L.F.	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).
810	170 L.F.	Furnish and install 7-conductor electrical cable (No. 14 A.W.G.).
811	1 EA.	Furnish and install electrical handhole.
815	65 L.F.	Sawcut for signal (loop detector).
	2 EA.	Relocate existing signal heads.
	2 EA.	Relocate existing overhead sign.
	1 EA.	Remove existing handhole.



WIRING DIAGRAM



WIRING KEY

- A _ CANOGA 4-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) SHIELDED
- B 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- C 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- EL EXTISTING LOOP WIRE
- LW LOOP WIRE (NO. 14 A.W.G.)
- ES EXISTING UNDERGROUND SERVICE TO BE MAINTAINED BY PEPCO

The following contact persons

Mr. Majid Shakib Assistant District Engineer - Traffic

Mr. Randy Brown Assistant District Engineer – Maintenance Phone: (301) 513–7304

Mr. Augie Rebish

Mr. Richard L. Daff, Sr.

SEQUENCE OF OPERATION SHEET

MD 117 (CLOPPER ROAD) TRAFFIC OPERATIONS SECTION RUNS IN AN DIVISION OF TRAFFIC ENGINEERING MONTGOMERY COUNTY, MARYLAND EAST-WEST DIRECTION

INTERCECT	TON- 140	447 (0)	00000	AD \ AND	HODK THE	DOAD	NO		
INTERSECT	10N: MD	117 (01	OPPER RO	AD) AND	HUPKINS	RUAD	PHASING		
		SIGNAL HEAD INDICATIONS							
SIGNAL NO.	1,2,				5,6		N Ø II		
TOTAL:	4				2		0 2 Ø6 *		
LEGEND	R		R	R	R		T 6 → Ø2		
LIMITED R RED	Y	Ŷ	← Y) (Y)	\bigcirc	Y		Ø		
Y YELLOW G GREEN ← ARROW	G		4 G G	(G)	G	9"or12"	4 04		
F FLASHING	12"	12"	12"	12"	8 "				

	SEQ	UEN(CE OF	OPI	ERAT	ION	F
SIGNAL	INTERVAL						A S H
NO.	1	2	3	4	5	6	H
1	G	Υ	R	R	Ŗ	R	Υ
2	G	Y	R	R	R	R	Υ
3	G	Υ	R	R	R	R	Y
4	G	Y	R	R	R	R	Y
5	R	R	R	G	Υ	R	R
6	R	R	R	G	Υ	R	R
		<u> </u>				-	
			ALL			ALL	
PHASE	2 (ፄ 6	RED	4	1	RED	

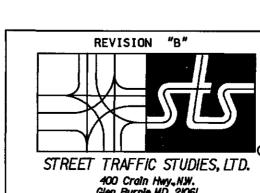
SUBMITTED: CHECKED: APPROVED: IN SERVICE BY: DATE: TIME:

for District #3 are as follows:

Phone: (301 513-7358)

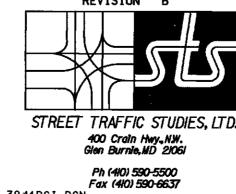
Assistant District Engineer - Utility Phone: (301) 513-7350

Chief, Traffic Operations Division Phone: (410) 787-7630



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Troffic 9. Section TRAFFIC ENGINEERING DESIGN DIVISION MD 117 (CLOPPER ROAD)

AND HOPKINS ROAD DRAWN BY: __STS_ CHECKED BY: RRZ @ 1/02 3543B S.H.A. NO. **BW996M82** SHEET NO. SCALE: 1"= 20' MONTGOMERY COUNTY: T.I.M.S. NO. 2 of 2 DATE: 12-20-01



3941BGI.DGN